

### **REMARKS**

This response is intended as a full and complete response to the non-final Office Action mailed April 30, 2008 ("Office Action"). By this response, Applicants have amended independent claims 28 and 37.

In view of the foregoing amendments and the following discussion, Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Thus, Applicants believe that all of these claims are now in allowable form. Applicants also submit that the amendments are supported by the original specification as filed, at the least by page 18, paragraph 4, and page 19, paragraph 2; thus, no new matter has been added.

It is to be understood that, by amending the claims, Applicants do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant response including amendments.

### **35 U.S.C. §103 Rejection of Claims 28, 30-34, 36-37, 39-45 and 47**

The Examiner has rejected claims 28, 30-34, 36-37, 39-45 and 47 under 35 U.S.C. §103(a) as being unpatentable over Lanier et al. (U.S. 5,588,104, hereinafter "Lanier I") in view of Lanier et al. (U.S. 5,588,139, hereinafter "Lanier II") further in view of Young (U.S. 4,706,121, hereinafter "Young") further in view of McMullan, Jr. et al. (U.S. 5,142,690, hereinafter "McMullan"). Applicants respectfully traverse the rejection.

As discussed in Applicants' response to the Office Action mailed February 2, 2008, Applicants respectfully submit that Lanier I, Lanier II, Young, and McMullan, alone or in any permissible combination, fail to teach or suggest Applicants' invention of a method for placing virtual objects in virtual object locations in a video program at a head end in a television program delivery system, as specifically recited by Applicants' independent claims 28 and 37. Specifically, Applicants' independent claims 28 and 37 positively recite:

28. A method for placing virtual objects in virtual object locations in a video program at a head end in a television program delivery system, comprising:  
receiving at the head end a plurality of virtual objects, wherein said head end is coupled to a plurality of set top terminals;  
storing the plurality of virtual objects in a database;  
identifying at the head end at least one virtual object location for each frame of the video program;  
selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information;  
inserting at the head end the one or more of the plurality of virtual objects into the identified at least one virtual object location during a display or storage of the video program; and  
transmitting said video program to said targeted terminal. (Emphasis added).
37. An operations center located at a head end, in a television program delivery system that receives a plurality of virtual objects and video programs having virtual object locations and places the virtual objects into the video programs, comprising:  
a database for storing the received plurality of virtual objects;  
a virtual object location definer for identifying at least one virtual object location;  
a virtual object selector for selecting at least one of the plurality of virtual objects to be transmitted to a targeted viewer terminal of a plurality of viewer terminals coupled to said head end according to a set of placement rules, wherein the targeted viewer terminal is targeted by demographic information;  
and  
a targeted virtual object management system for selecting at least one of the plurality of virtual objects according to targeting information and inserting the selected at least one of the plurality of virtual objects into the at least one virtual object location during a display of the video programs at said viewer terminal. (Emphasis added).

In one embodiment, Applicants' invention teaches a head end-centric method and operations center for inserting virtual objects into video programs. Consequently, Applicants' invention advantageously allows the set top terminals located at a subscriber's home to be cheaper and require less hardware. In another embodiment, Applicants' invention teaches a targeted terminal of a plurality of set top terminals, wherein a targeted terminal is targeted by demographic information. This invention advantageously allows for the selection of virtual objects more aptly suited and better

tailored for video program viewer. In addition, the terminals located at the viewer's location requires less processing power, thereby, reducing costs of the terminals.

The Examiner concedes that Lanier I, Lanier II, and Young "fail[s] to teach head end coupled to a plurality of set top terminals and transmitted to a targeted terminal of said plurality of set-top terminal." (See Office Action, p. 3). However, the Examiner now asserts that McMullan teaches head end is coupled to a plurality of set top terminals and transmitted to a targeted terminal of said plurality of set-top terminals. Applicants respectfully disagree, and submit that McMullan fails to bridge the substantial gap between Lanier I, Lanier II and Young and Applicants' invention of independent claims 28 and 37.

Specifically, McMullan is devoid of any teaching or suggestion of at least the claimed limitation of selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information, as recited by Applicants' claim 28, herein amended. Notably, the downstream signals taught by McMullan are simply command signals and the video programming signals typically found in cable television distribution systems. (See McMullan, col. 9, ll. 11-34). Nowhere, in McMullan does McMullan teach or suggest the selection and transmission of one or more virtual objects to a targeted terminal.

Thus, even if Lanier I, Lanier II, Young and McMullan were permissibly combined, the combination would still fail to teach or suggest selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information. Lanier I and Lanier II teach that virtual objects are created, stored and processed locally by a computer (i.e. a terminal). (See Lanier I and Lanier II, generally). Notably, the processing required by Lanier I and Lanier II makes the costs of mass distribution of the terminals prohibitive. Young only teaches broadcast of TV schedule information via an FM broadcast. (See Young, col. 6, ll. 18-28). As noted above, McMullan only teaches typical downstream communication of commands and television programs. More

specifically, McMullan directed towards the upstream communication and aggregation of statistics on data throughput and received signal strength. (See McMullan, col. 4, ll. 38-41). Thus, the combination of Lanier I, Lanier II, Young and McMullan would only teach broadcasting television schedules over FM to a computer that creates, stores and processes virtual objects locally and the ability to send signals upstream for aggregation of statistics on data throughput and received signal strength. Notably, the combination of Lanier I, Lanier II, Young and McMullan does not teach or suggest selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information.

Moreover, McMullan fails to teach or suggest a targeted terminal is targeted by demographic information. Applicants note that McMullan discloses a set-top terminal including “a unique digital identifier... which permits the cable operator to send commands directly to an individual set-top individual.” (See McMullan, col. 9, ll. 45-49). McMullan further discloses the “head end controller send[ing] an addressed only transaction throughout the cable system.” (See McMullan, col. 46, ll. 32-34, col. 47, ll. 1-3 and 22-24). However, McMullan, at best, discloses a transmission of “calibration parameter transactions” from a head end to selected set top terminals for the purpose of regular maintenance checkups on signal strength and data throughput, wherein terminals are only selected by a system operator or by self-nomination. (See McMullan, col. 26, ll. 4-8, col. 48, ll. 10-15). In other words, McMullan merely discloses the selection of a set top terminal by the manual nomination of a maintenance person or by the self nomination of a set top terminal. As such, McMullan fails to teach or suggest targeting a specific terminal by demographic information. Moreover, Lanier I, Lanier II and Young also fail to teach or suggest targeting a specific terminal by demographic information.

Therefore, Applicants respectfully submit that independent claims 28 and 37 are patentable under 35 U.S.C. 103(a) over Lanier I in view of Lanier II further in view of Young further in view of McMullan. Furthermore, each of the remaining rejected claims depends from one of these claims and recites additional limitations therefrom.

Therefore, these remaining rejected claims are patentable for at least the reasons discussed above with respect to the claims from which they depend. Therefore, Applicants respectfully request that the Examiner's rejection be withdrawn.

### **35 U.S.C. §103 Rejection of Claims 29 and 38**

The Examiner has rejected claims 29 and 38 under 35 U.S.C. §103(a) as being unpatentable over Lanier I in view of Lanier II further in view of Young further in view of McMullan further in view of Esch et al. (US Patent 5,283,639, hereinafter Esch). Applicants respectfully traverse the rejection.

Claims 29 and 38 depend from independent claim 28 and 37, respectively, and recite additional limitations thereof. For at least the reasons discussed above, the combination of Lanier I, Lanier II, Young and McMullan fails to teach or suggest Applicants' invention as recited in independent claims 28 and 37. Specifically, none of the prior art references currently cited teaches or suggests a method or an operations center for placing virtual objects in virtual object locations in a video program at a head end comprising selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information. Moreover, Esch fails to bridge the substantial gap left by Lanier I, Lanier II, Young and McMullan because Esch specifically teaches that all the customization occurs at each remote site (i.e. a set top terminal) and not at the head end. (See Esch, col. 4, ll. 14-19; col. 5, ll. 22-46; col. 7, ll. 18-20).

Accordingly, any attempted combination of the Lanier I, Lanier II, Young and McMullan references with any additional reference(s), in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim. As such, Applicants submit that dependent claims 29 and 38 are patentable under 35 U.S.C. §103 over the combination of Lanier I, Lanier II, Young, McMullan and Esch. Therefore, Applicants respectfully requests that the Examiner's rejection be withdrawn.

**35 U.S.C. §103 Rejection of Claims 35 and 46**

The Examiner has rejected claims 35 and 46 under 35 U.S.C. §103(a) as being unpatentable over Lanier I in view of Lanier II further in view of Young further in view of McMullan further in view of de Hond (US Patent 5,737,533, hereinafter Hond). Applicants respectfully traverse the rejection.

Claims 35 and 46 depend from independent claim 28 and 37, respectively, and recite additional limitations thereof. For at least the reasons discussed above, the combination of Lanier I, Lanier II, Young and McMullan fails to teach or suggest Applicants' invention as recited in independent claims 28 and 37. Specifically, none of the prior art references currently cited teaches or suggests a method or an operations center for placing virtual objects in virtual object locations in a video program at a head end comprising selecting at the head end one or more of the plurality of virtual objects to be transmitted to a targeted terminal of said plurality of set top terminals according to a set of placement rules and targeting information, wherein the targeted terminal is targeted by demographic information. Accordingly, any attempted combination of the Lanier I, Lanier II, Young and McMullan references with any additional reference(s), in a rejection against the dependent claims, would still result in a gap in the combined teachings in regards to the independent claim.

Moreover, Applicants respectfully submit Hond fails to bridge the substantial gap left by Lanier I, Lanier II, Young and McMullan because Hond is not a proper reference. Applicants claim priority to U.S. Patent Application Serial No. 07/991,074 filed on December 9, 1992. The earliest filing date of Hond is October 26, 1995. As a result, the effective filing date of Applicants' invention is earlier than the effective filing date of Hond. Therefore, Hond is not a proper reference against Applicants' invention.

As such, Applicants submit that dependent claims 35 and 46 are patentable under 35 U.S.C. §103 over the combination of Lanier I, Lanier II, Young, McMullan and Hond. Therefore, Applicants respectfully requests that the Examiner's rejection be withdrawn.

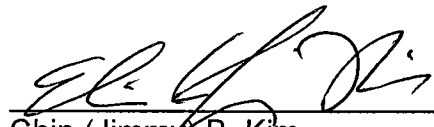
**CONCLUSION**

Thus, Applicants submit that none of the claims presently in the application, are obvious under the provisions of 35 U.S.C. §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall or Jimmy Kim, at (732) 530-9404, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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